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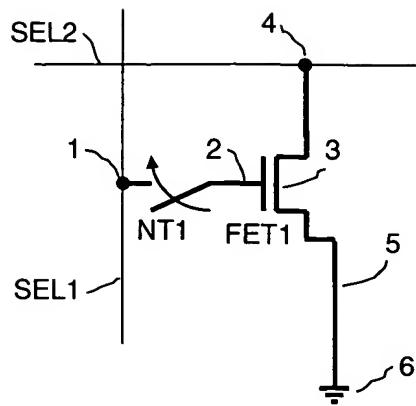


Figure 1A

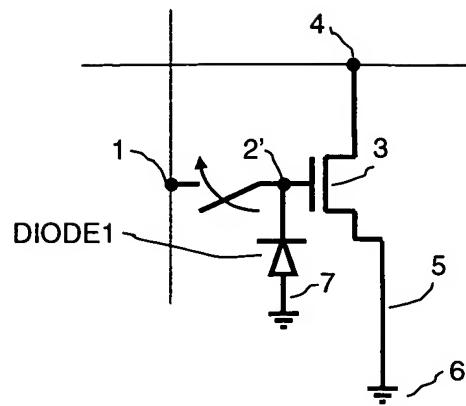


Figure 1B

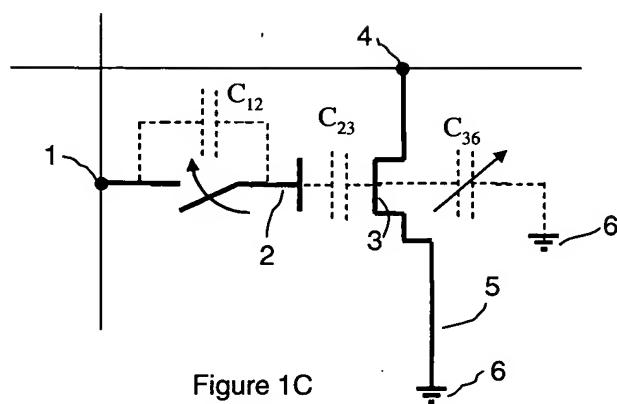


Figure 1C

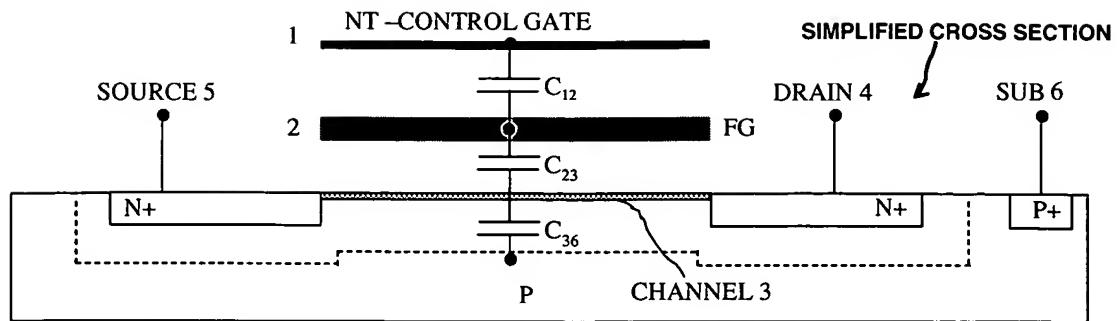
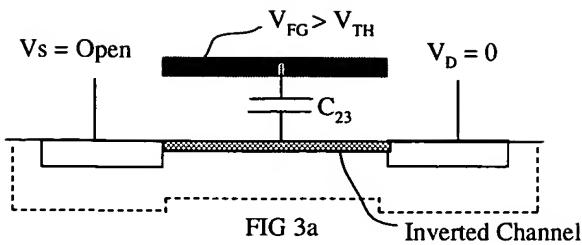


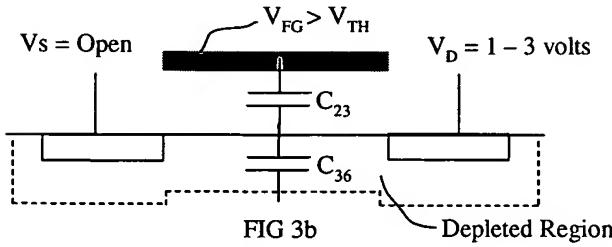
FIG 2



### CHANNEL REGION MODULATION

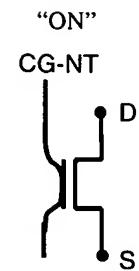
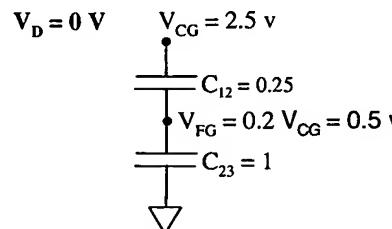
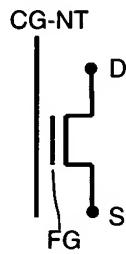


Inverted Channel: electrons at  $V_D = 0$  volts



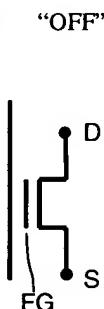
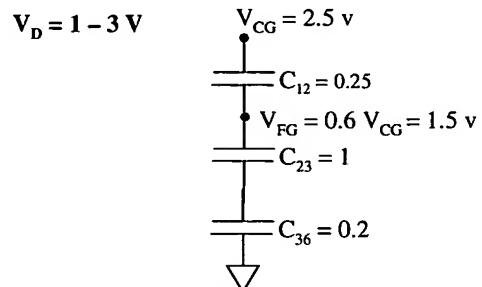
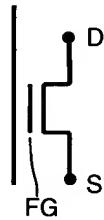
Depleted Channel: electrons flow to positive terminal

WRITE "1": "OFF"



NT Select Voltage  $V_{NT\ SELECT} = V_{CG} - V_{FG} = 2.0 \text{ v}$   
FIG 4a

WRITE "0": "OFF"



NT Select Voltage  $V_{NT\ SELECT} = V_{CG} - V_{FG\ NT} = 1.0 \text{ v}$   
FIG 4b

NET: NT SELECT (WRITE) VOLTAGE THRESHOLD RANGE  $1.0 \text{ v} < V_{NT\ TH} < 2.0 \text{ v}$

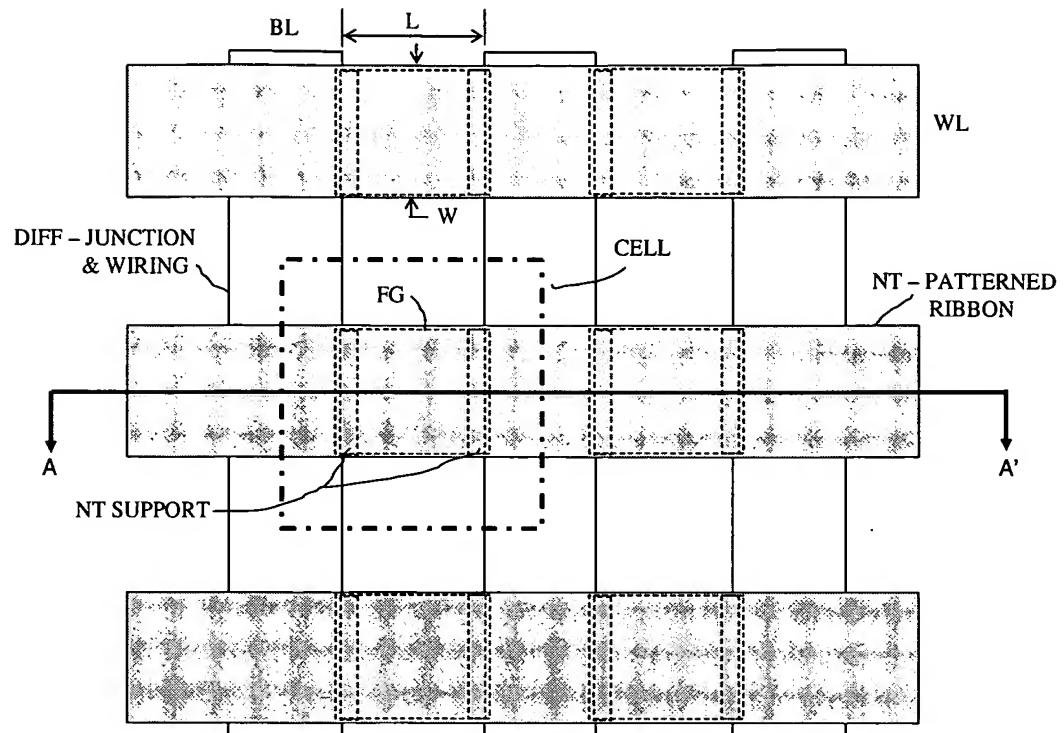
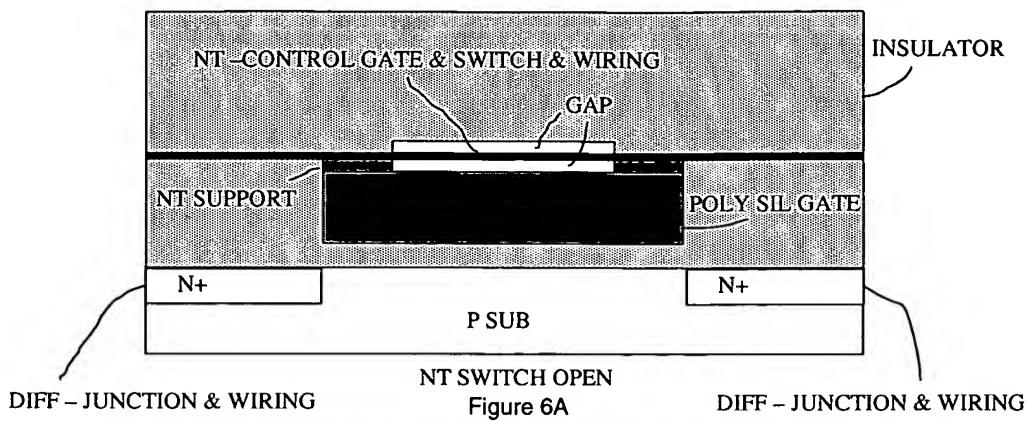
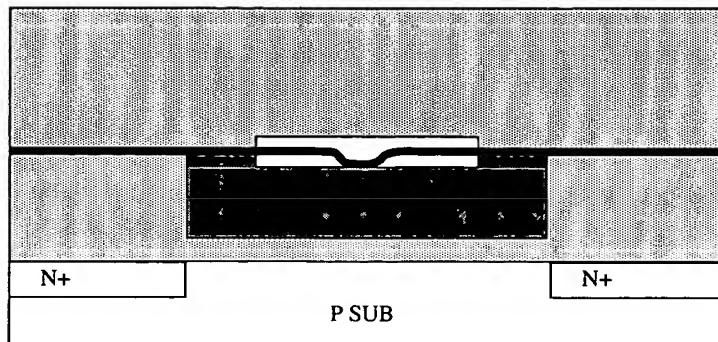


Figure 5



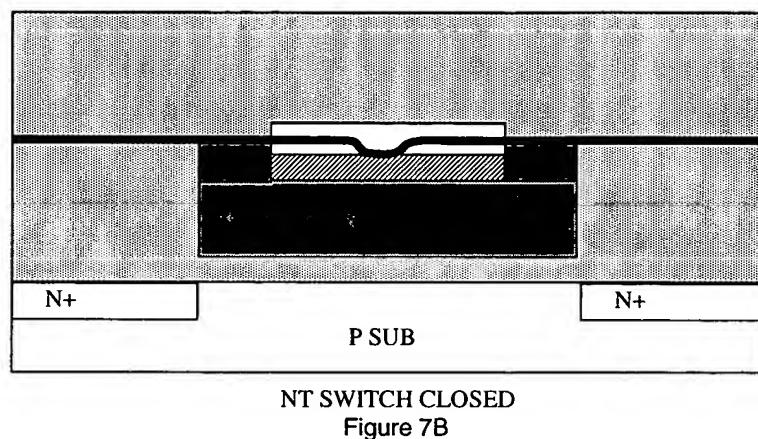
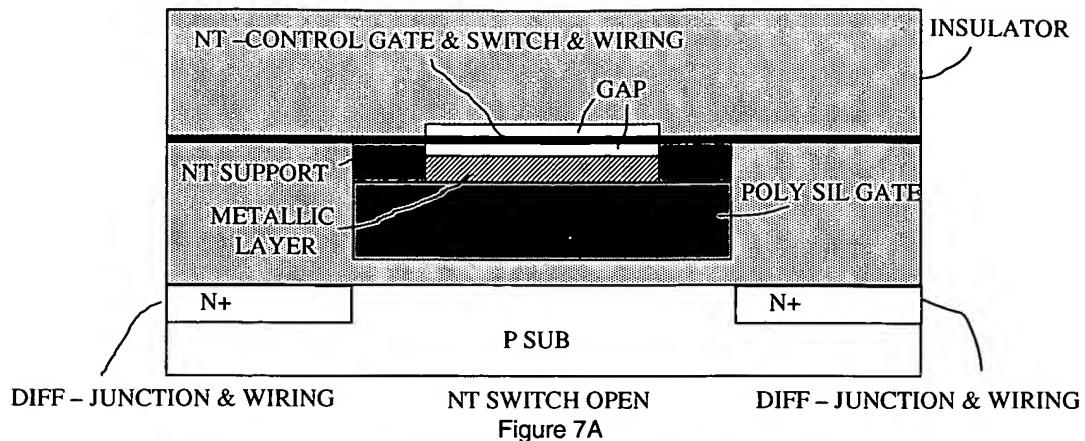
NT SWITCH OPEN

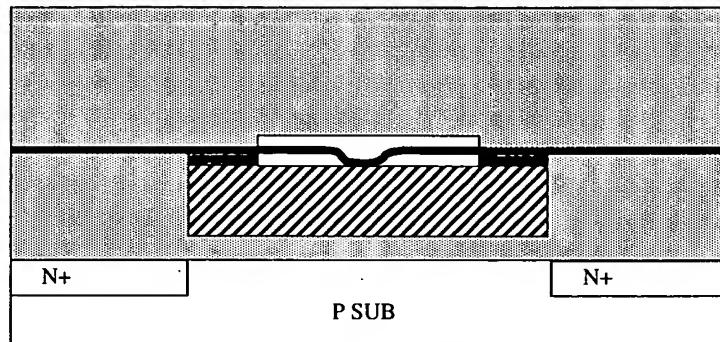
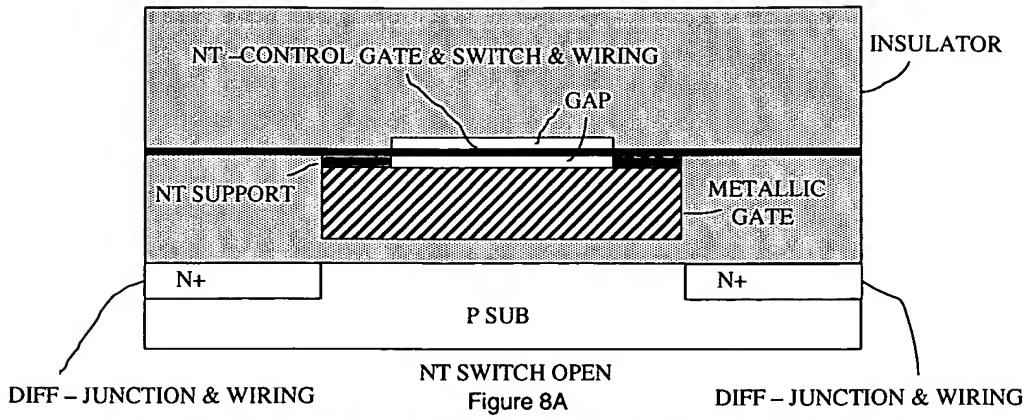
Figure 6A



NT SWITCH CLOSED

Figure 6B





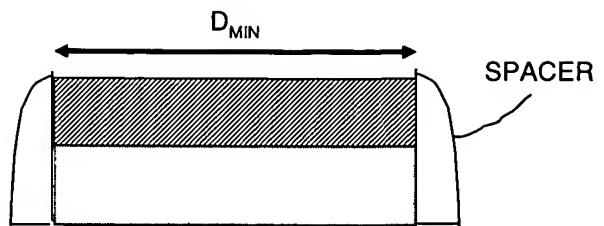


Figure 9B

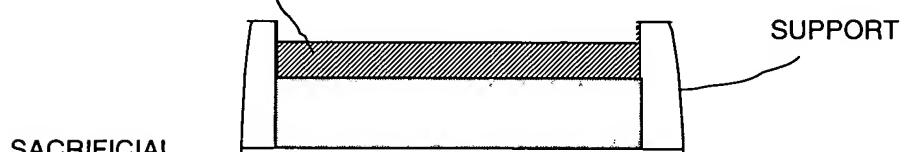


Figure 9C

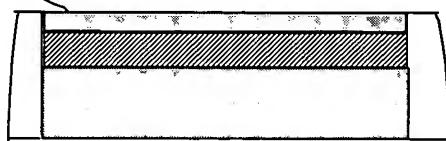


Figure 9D

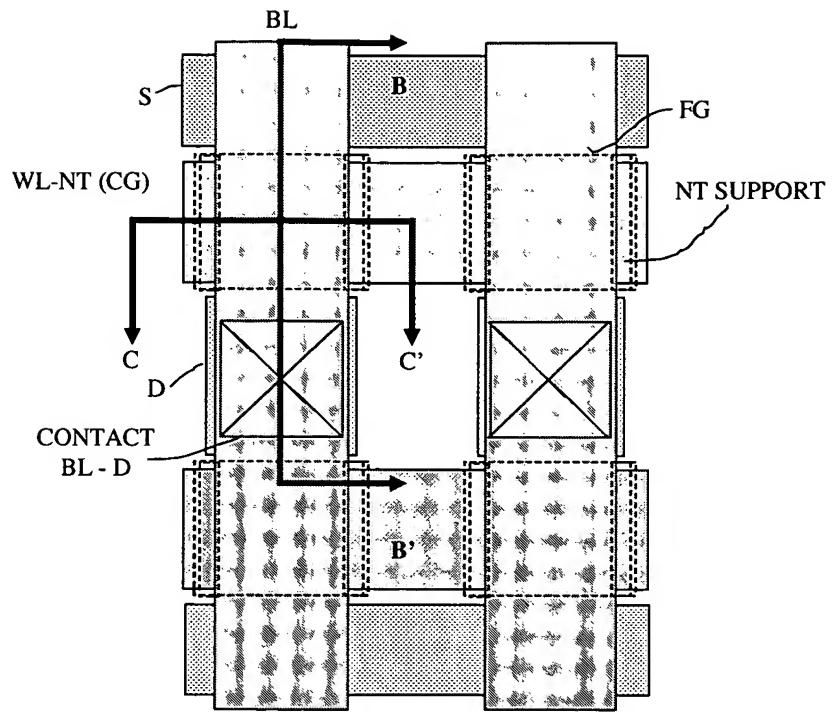


Figure 10

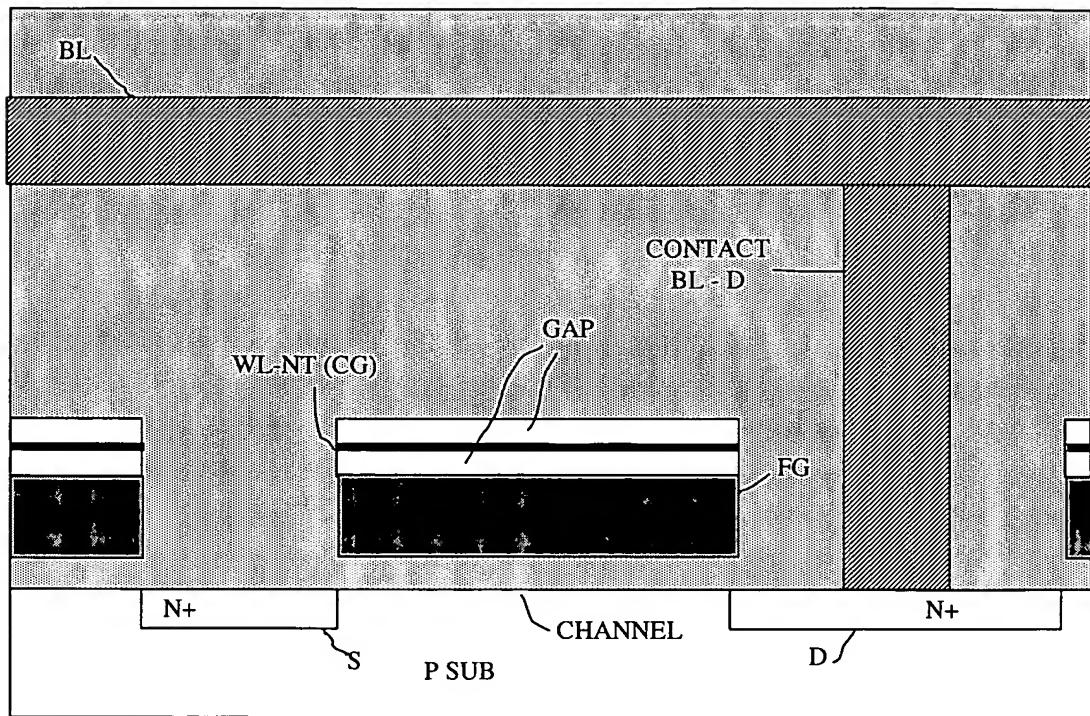


Figure 11

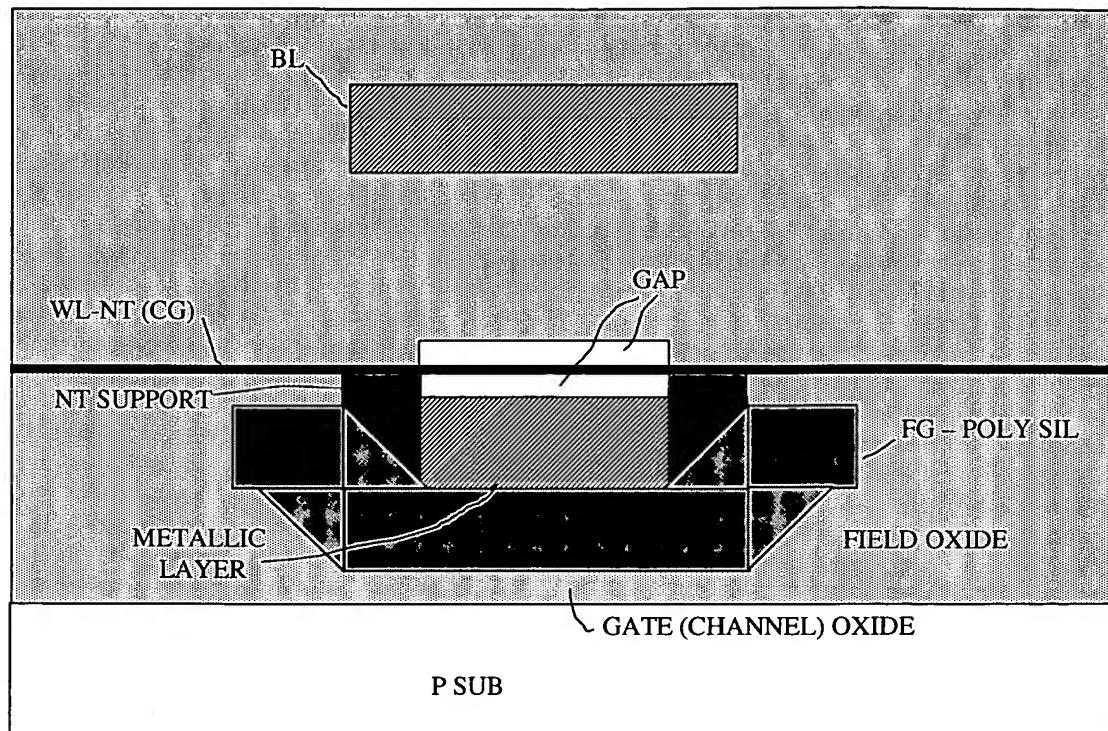


Figure 12

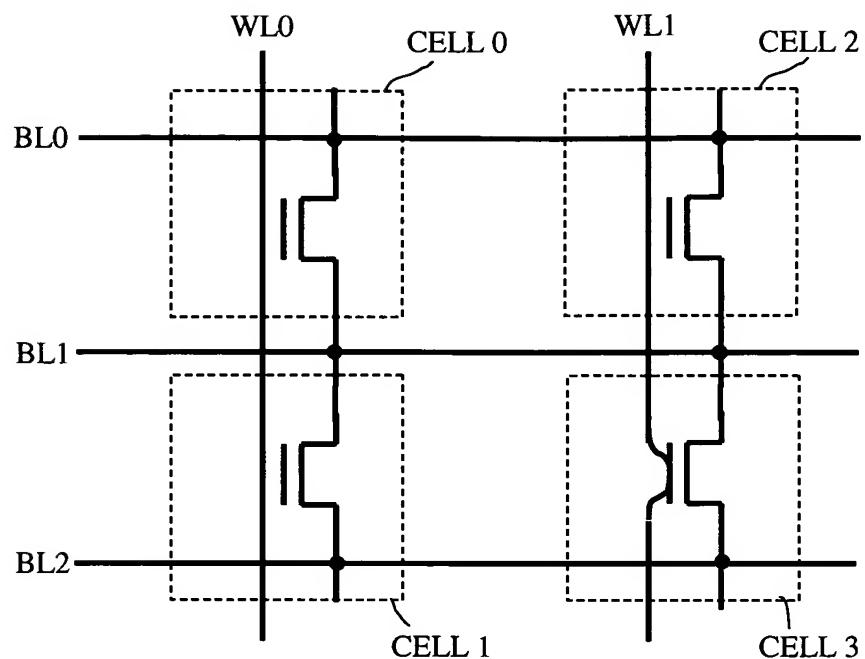
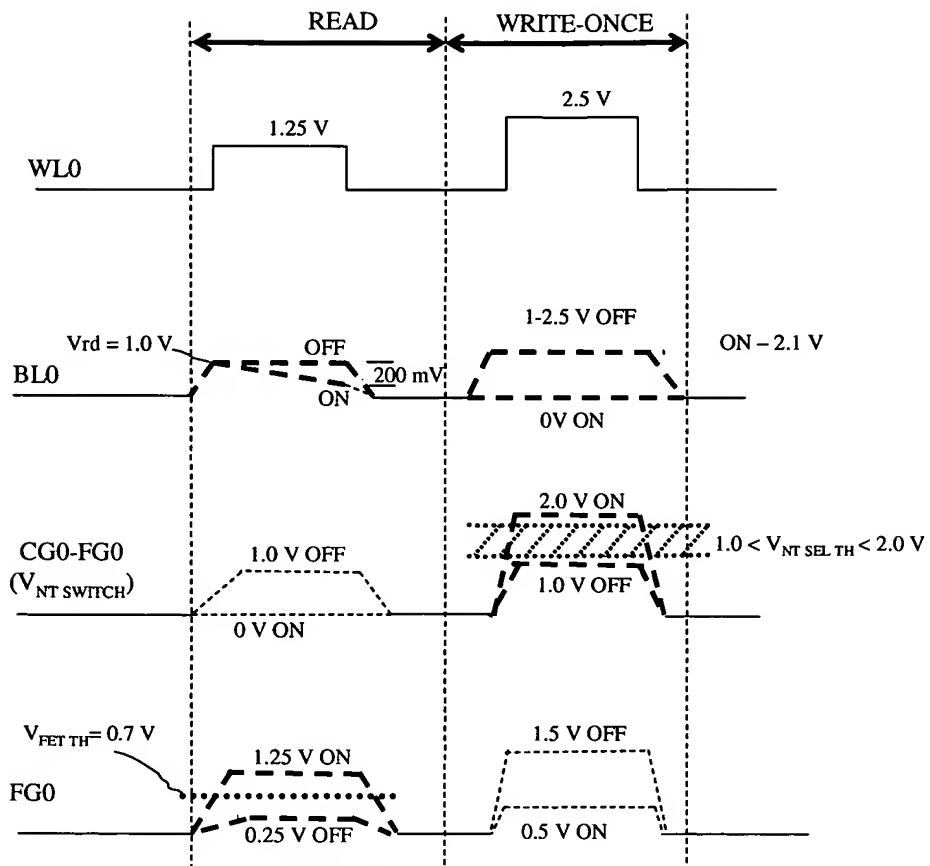


Figure 13



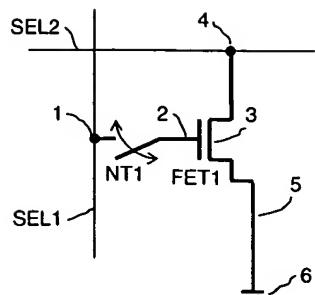


Figure 15A

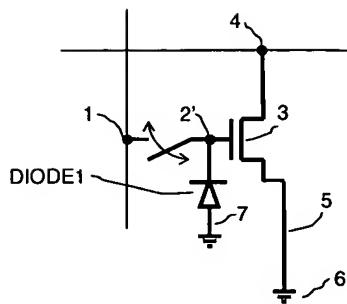


Figure 15B

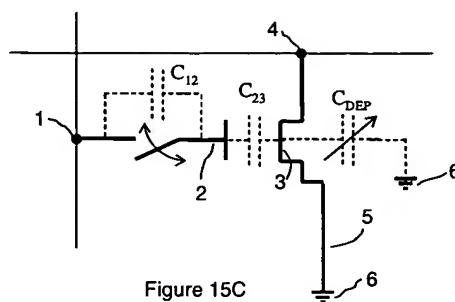


Figure 15C

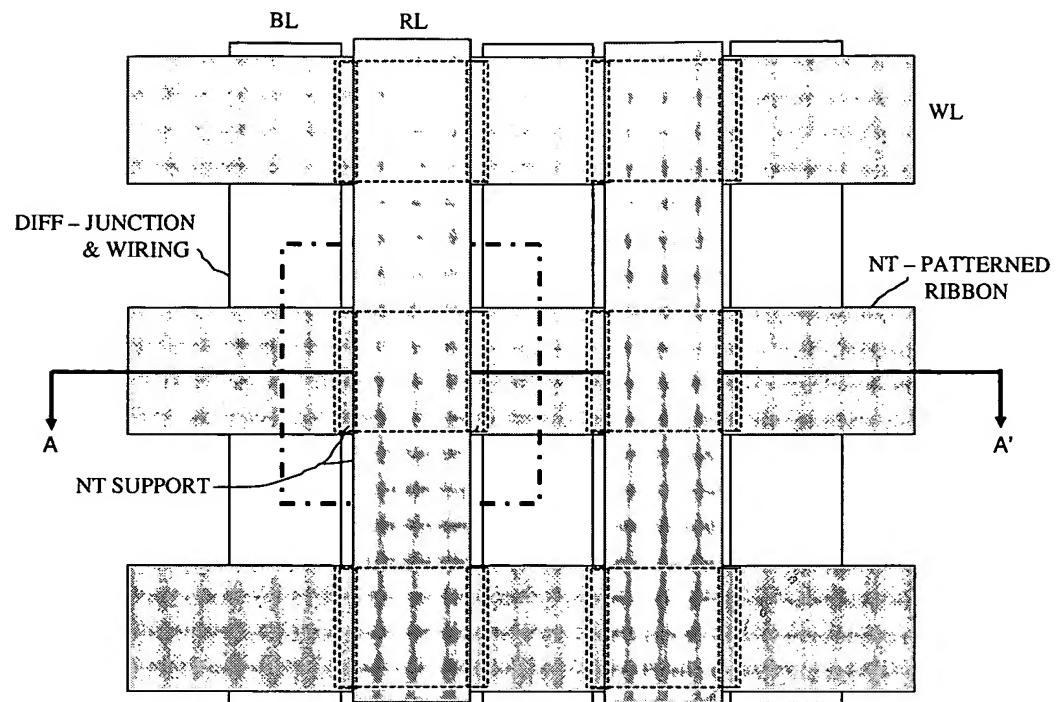
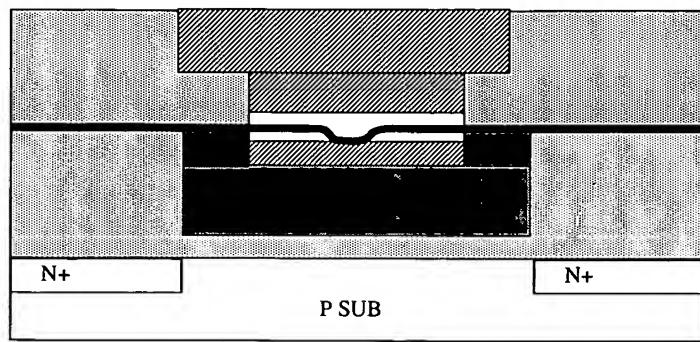
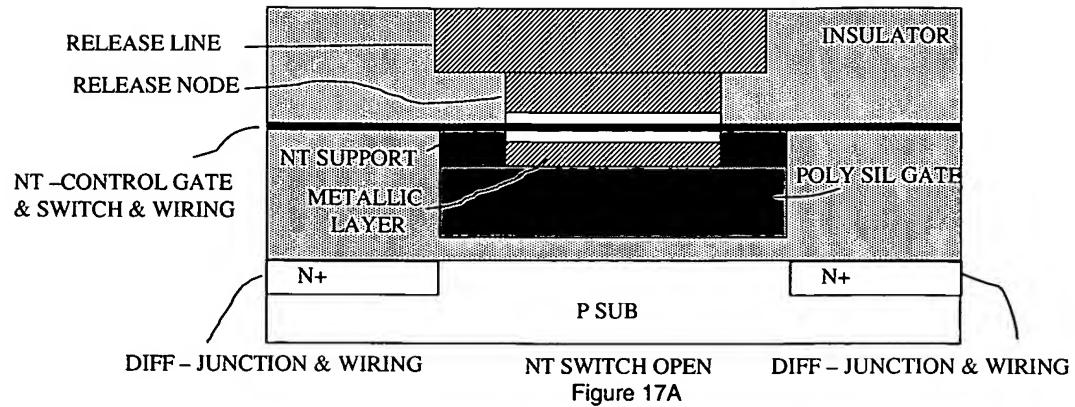


Figure 16



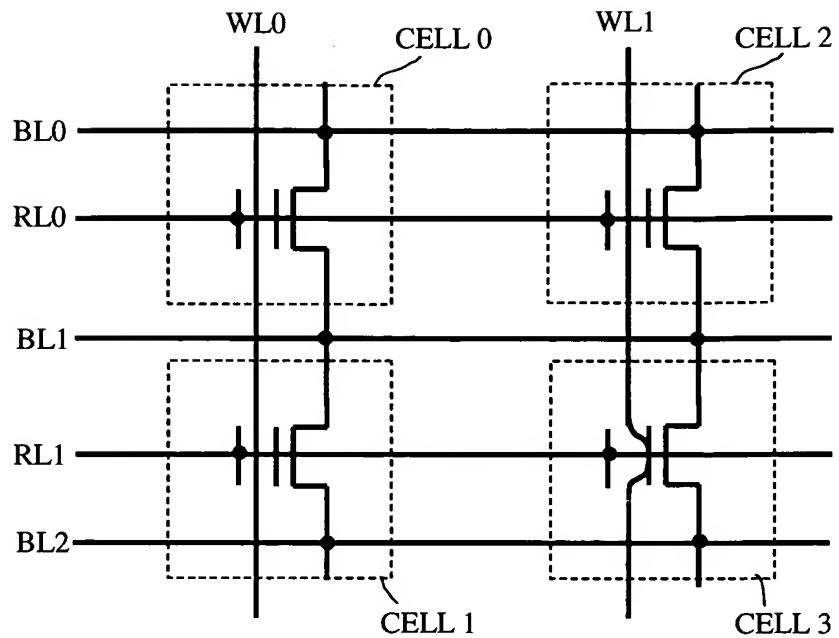


Figure 18

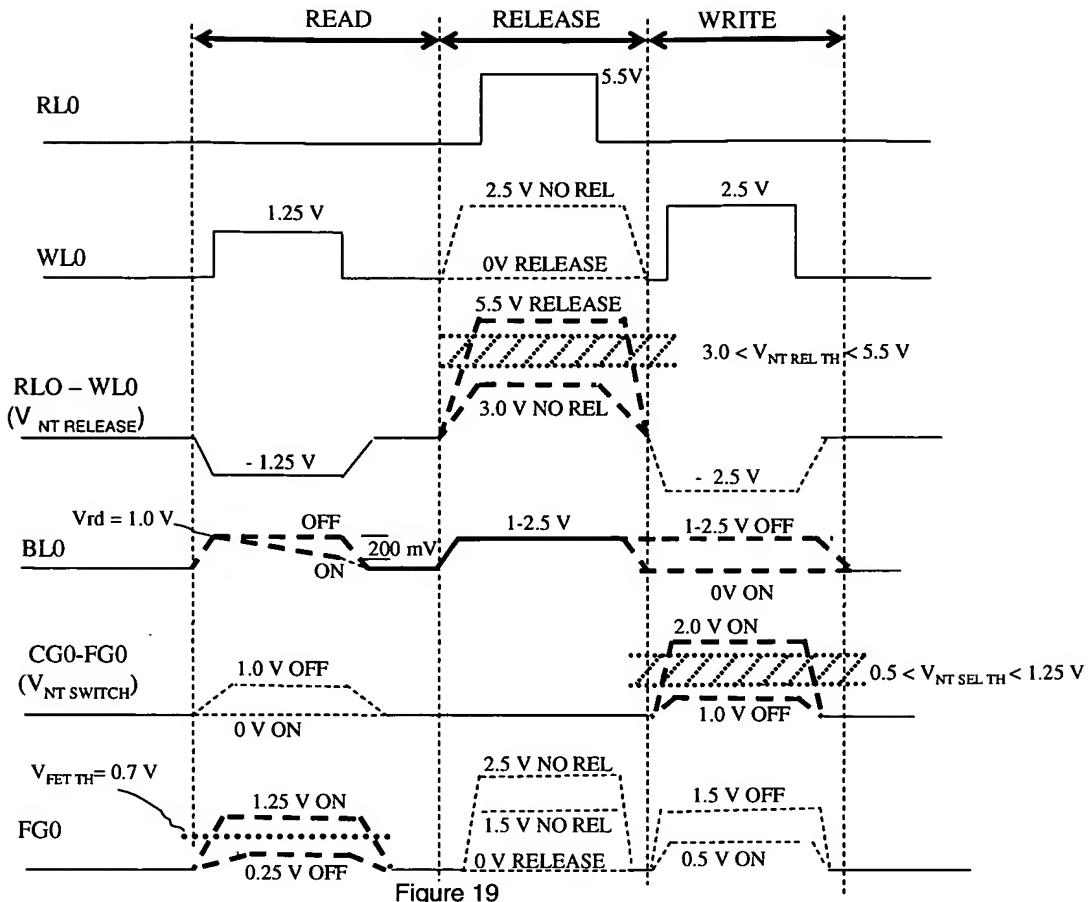


Figure 19

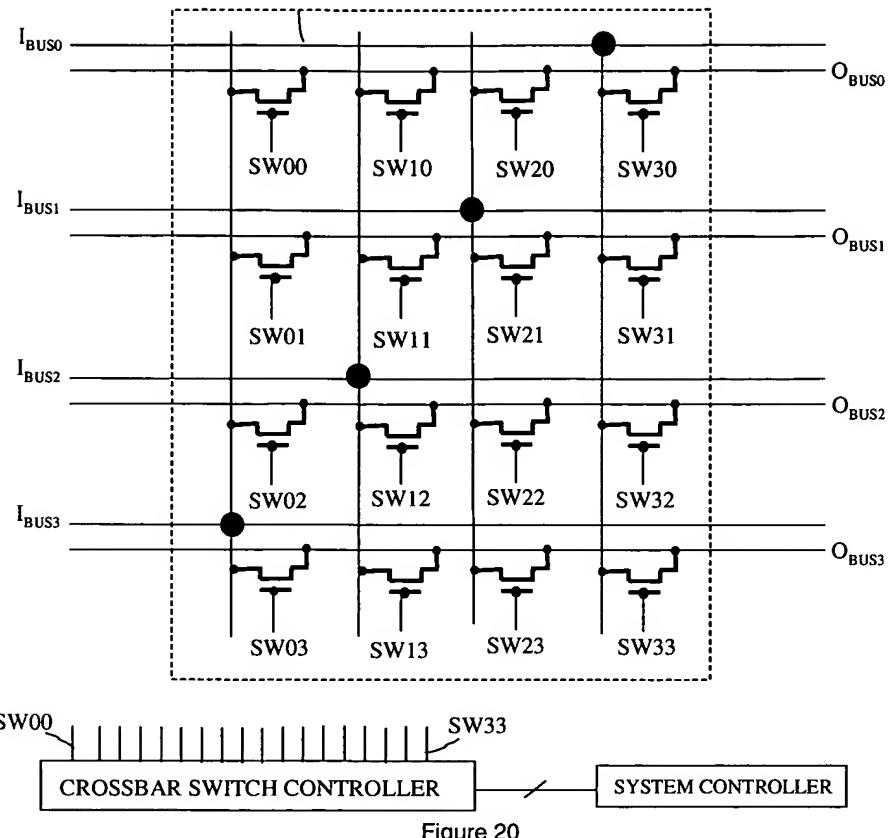


Figure 20

Prior Art

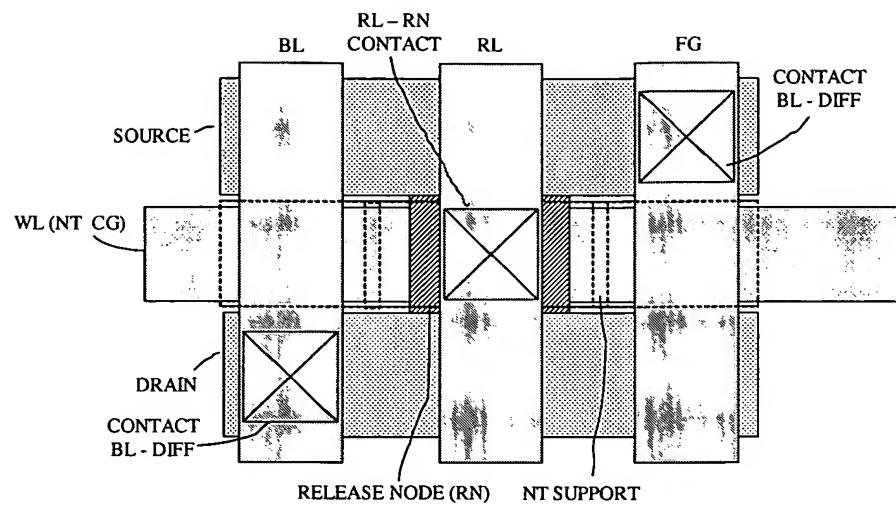


Figure 21

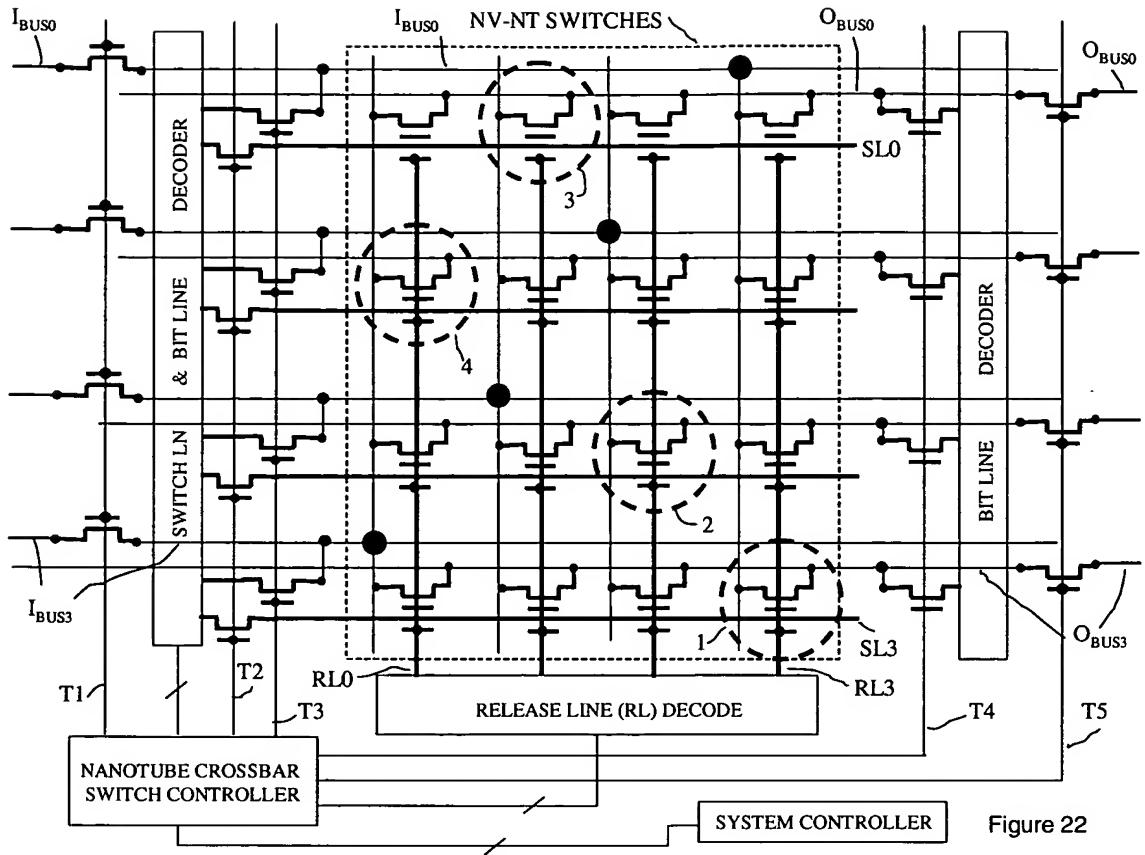


Figure 22